

B1

--81. (Amended) A surface optical apparatus comprising:

a surface light emitting device;

a substrate for supporting the surface light emitting device;

wherein the surface light emitting device includes a protrusion with
an opening; and

a photodetector to detect output light from the surface light emitting
device.

*Sub
C1
cont.*

82. (Unamended) A surface optical apparatus according to claim 81,
wherein evanescent light leaks from the opening.

83. (Unamended) A surface optical apparatus according to claim 81,
wherein the size of the opening is less than 100 nm.

84. (Unamended) A surface optical apparatus according to claim 81,
wherein the shape of the protrusion is a quadrangle pyramid.

85. (Unamended) A surface optical apparatus according to claim 81,
wherein said surface light emitting device is supported by said substrate through an elastic
supporter.

B2

86. (Amended) A surface optical apparatus comprising:

*Could
B2*

a surface light emitting device; and
a substrate for supporting the surface light emitting device through
an elastic supporter; wherein said substrate comprises a Si substrate with a SiN_x thin layer
formed thereon, and said elastic supporter comprises a portion of said SiN_x thin layer under
which Si substrate is removed and wherein the surface light emitting device includes a
protrusion with an opening.

*Sub
C1
C440.*

87. (Amended) A surface optical apparatus comprising:
a surface light emitting device; and
a substrate for supporting the surface light emitting device through
an elastic supporter; wherein said substrate comprises a Si substrate with a SiN_2 thin layer
and a Si thin formed thereon in this order, and said elastic supporter comprises a portion of
said Si thin layer under which said Si substrate and said SiN_2 thin layer are removed and
wherein the surface light emitting device includes a protrusion with an opening. .

88. (Cancelled)

89. (Unamended) A surface optical apparatus according to claim 81,
wherein said surface light emitting device comprises a surface emitting semiconductor
laser.

90. (Unamended) A surface optical apparatus according to claim 81,
wherein said surface light emitting device comprises thin semiconductor layers grown on
another substrate, and said another substrate is mounted on said substrate.

91. (Unamended) A surface optical apparatus according to claim 89,
wherein the surface emitting semiconductor laser includes at least one of a layer of GaAs, a
layer of AlGaAs and a layer of InGaAs.

92. (Unamended) A surface optical apparatus according to claim 89,
wherein the surface emitting semiconductor laser includes at least one of a layer of GaN, a
layer of AlGaN and a layer of InGaN.

93. (Amended) A surface optical apparatus comprising:
an elastic supporter;
a surface light emitting device on the elastic supporter; and
a photodetector to detect output light from the surface light emitting
device.

94. (Unamended) A surface optical apparatus according to claim 93,
wherein said elastic supporter is shaped into a cantilever.

95. (Unamended) A surface optical apparatus according to claim 93, wherein said elastic supporter is shaped as a trapezoidal cantilever whose central portion is removed.

96. (Unamended) A surface optical apparatus according to claim 93, wherein said surface light emitting device comprises a surface emitting semiconductor laser.

97. (Cancelled)

98. (Unamended) A surface optical apparatus according to claim 96, wherein the surface emitting semiconductor laser includes at least one of a layer of GaAs, a layer of AlGaAs and a layer of InGaAs.

99. (Unamended) A surface optical apparatus according to claim 96, wherein the surface emitting semiconductor laser includes at least one of a layer of GaN, a layer of AlGaN and a layer of InGaN.--

REMARKS

The claims are 81-87, 89-96, 98 and 99 with claims 81 and 93 being independent. Former claims 88 and 97 have been cancelled without prejudice or disclaimer.